- (3) to ensure the continued operation of university research reactors.
  - (b) Definitions.—In this section:
- (1) ADVANCED NUCLEAR REACTOR.—The term "advanced nuclear reactor" has the meaning given the term in section 951(b) of the Energy Policy Act of 2005 (42 U.S.C. 16271(b)).
- (2) EPSCOR UNIVERSITY.—The term "EPSCOR university" means an institution of higher education that participates in the Established Program to Stimulate Competitive Research Federal-State partnership program designed to enhance the capabilities of universities to conduct sustainable and nationally competitive energy-related research administered by the Department of Energy.
- (3) HISTORICALLY BLACK COLLEGE OR UNIVERSITY.—The term "historically Black college or university" has the meaning given the term "part B institution" in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061)
- (4) Institution of Higher Education.—The term "institution of higher education" has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).
- (5) MINORITY-SERVING INSTITUTION.—The term "minority-serving institution" has the meaning given the term "minority institution" in section 365 of the Higher Education Act of 1965 (20 U.S.C. 1067k).
- (6) NATIONAL LABORATORY.—The term "National Laboratory" has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).
- (7) PROGRAM.—The term "program" means the University Infrastructure Revitalization Program established under subsection (c).
- (8) SECRETARY.—The term "Secretary" means the Secretary of Energy.
- (c) Establishment of Program.—Not later than 120 days after the date of enactment of this Act, the Secretary shall establish a program, to be known as the "University Infrastructure Revitalization Program", to procollaborations, partnerships, and knowledge sharing between institutions of higher education, including EPSCoR universities, historically Black colleges and universities, and minority-serving institutions, National Laboratories, industry, and associated labor unions with the mission to revitalize and upgrade existing nuclear science and engineering infrastructure and develop new capabilities and expertise to support the development of advanced nuclear reactor technologies and applications.
  - (d) Consortia.
- (1) IN GENERAL.—In carrying out the program, the Secretary shall establish university-led consortia comprised of institutions of higher education, including EPSCoR universities, historically Black colleges and universities, and minority-serving institutions, National Laboratories, industry, and associated labor unions to enhance university-based nuclear science and engineering infrastructure
- (2) ACTIVITIES.—The Secretary shall competitively award to consortia established under paragraph (1) awards—
- (A) to enhance existing capabilities and establish new capabilities and expertise;
- (B) to provide project management services and support, technical support, quality engineering and inspections, and nuclear material support to—
- (i) existing university nuclear science and engineering programs in the United States as of the date of enactment of this Act;
- (ii) the 25 existing research reactors at universities in the United States as of the date of enactment of this Act; and
- (iii) new and emerging nuclear science and engineering programs at institutions of higher education, including—
  - (I) EPSCoR universities;

- (II) historically Black colleges and universities; and
- (III) minority-serving institutions.
- (e) FUNDING.—Notwithstanding any other provision of this Act, of the amounts authorized in section 2117(a), \$50,000,000 is authorized for each of fiscal years 2022 through 2026 to carry out this section.
- SA 1932. Mr. INHOFE (for himself, Mr. Coons, and Mr. Cornyn) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table: as follows:

At the end of title III of division F, add the following:

# SEC. 6302. ADDRESSING THREATS TO NATIONAL SECURITY WITH RESPECT TO WIRE-LESS COMMUNICATIONS RESEARCH AND DEVELOPMENT.

(a) IN GENERAL.—Chapter 4 of title II of the Trade Expansion Act of 1962 (19 U.S.C. 1862 et seq.) is amended by adding at the end the following:

#### "SEC. 234, STATEMENT OF POLICY.

- "It is the policy of the United States-
- "(1) to ensure the continued strength and leadership of the United States with respect to the research and development of key technologies for future wireless telecommunications standards and infrastructure;
- "(2) that the national security of the United States requires the United States to maintain its leadership in the research and development of key technologies for future wireless telecommunications standards and infrastructure; and
- "(3) that the national security and foreign policy of the United States requires that the importation of items that use, without a license, a claimed invention protected by a patent that is essential for the implementation of a wireless communications standard and is held by a United States person, be controlled to ensure the achievement of the policies described in paragraphs (1) and (2).
- "SEC. 235. LIST OF FOREIGN ENTITIES THAT
  THREATEN NATIONAL SECURITY
  WITH RESPECT TO WIRELESS COMMUNICATIONS RESEARCH AND DEVELOPMENT.
- "(a) IN GENERAL.—The Secretary of Commerce (in this section referred to as the 'Secretary') shall establish and maintain a list of each foreign entity that the Secretary determines—
- "(1)(A) uses, without a license, a claimed invention protected by a patent that is essential for the implementation of a wireless communications standard and is held by a covered person; and
- "(B) is a person of concern or has as its ultimate parent a person of concern; or
- "(2) is a successor to an entity described in paragraph (1).
- "(b) WATCH LIST.—
- "(1) IN GENERAL.—The Secretary shall establish and maintain a watch list of each foreign entity—
- "(A)(i) that is a person of concern or has as its ultimate parent a person of concern; and
- "(ii) with respect to which a covered person has made the demonstration described in paragraph (2) in a petition submitted to the Secretary for the inclusion of the entity on the list; or

- "(B) that is a successor to an entity described in subparagraph (A).
  - "(2) Demonstration described.—
- "(A) IN GENERAL.—A covered person has made a demonstration described in this paragraph if the person has reasonably demonstrated to the Secretary that—
- "(i) the person owns at least one unexpired patent that is essential for the implementation of a wireless communications standard:
- "(ii) a foreign entity that is a person of concern, or has as its ultimate parent a person of concern, has been, for a period of more than 180 days, selling wireless communications devices in or into the United States, directly or indirectly, that are claimed, labeled, marketed, or advertised as complying with that standard:
- "(iii) the covered person has offered to the foreign entity or any of its affiliates—
- "(I) a license to the person's portfolio of patents that are essential to that standard; or
- "(II) to enter into binding arbitration to resolve the terms of such a license; and
- "(iv) the foreign entity has not executed a license agreement or an agreement to enter into such arbitration, as the case may be, by the date that is 180 days after the covered person made such an offer.
- "(B) DEMONSTRATION OF ESSENTIALITY.—A covered person may demonstrate under subparagraph (A)(i) that the person owns at least one unexpired patent that is essential for the implementation of a wireless communications standard by providing to the Secretary any of the following:
- "(i) A decision by a court or arbitral tribunal that a patent owned by the person is essential for the implementation of that standard.
- "(ii) A determination by an independent patent evaluator not hired by the person that a patent owned by the person is essential for the implementation of that standard.
- "(iii) A showing that wireless communications device manufacturers together accounting for a significant portion of the United States or world market for such devices have entered into agreements for licenses to the person's portfolio of patents that are essential for the implementation of that standard.
- "(iv) A showing that the person has previously granted licenses to the foreign entity described in subparagraph (A)(ii) or any of its affiliates with respect to a reasonably similar portfolio of the person's patents that are essential for the implementation of that standard.
- "(C) ACCOUNTING OF WIRELESS COMMUNICA-TIONS DEVICE MARKET.—A showing described in subparagraph (B)(iii) may be made either by including or excluding wireless communications device manufacturers that are persons of concern.
  - "(3) Procedures.—
- $\ensuremath{^{\prime\prime}(A)}$  Adding a foreign entity to the watch list.—
- "(i) IN GENERAL.—The Secretary may add a foreign entity to the watch list under paragraph (1) only after notice and opportunity for an agency hearing on the record in accordance with (except as provided in clause (iii)) sections 554 through 557 of title 5, United States Code.
- "(ii) MATTERS CONSIDERED AT HEARING.—An agency hearing conducted under clause (i)—
- "(I) shall be limited to consideration of—
  "(aa) whether the demonstration described in paragraph (2) has been reasonably made;
- "(bb) the amount of bond to be required in accordance with section 236; and
- "(II) may not include the presentation or consideration of legal or equitable defenses or counterclaims.

- "(B) ADMINISTRATIVE PROCEDURE.—Except as provided in subparagraph (A), the functions exercised under this section and section 236 shall not be subject to sections 551, 553 through 559, or 701 through 706 of title 5, United States Code.
- "(c) MOVEMENT BETWEEN LISTS.—A foreign entity on the watch list required by subsection (b)(1) may be moved to the list required by subsection (a), pursuant to procedures established by the Secretary, on or after the date that is one year after being included on the watch list if the foreign entity is not able to reasonably demonstrate that it has entered into a patent license agreement or a binding arbitration agreement with each covered person that has made the demonstration described in subsection (b)(2) with respect to the entity.
- "(d) REMOVAL FROM LISTS.—A foreign entity on the list required by subsection (a) or on the watch list required by subsection (b)(1) may petition the Secretary to be removed from that list on the basis that the conditions that led to the inclusion of the foreign entity on the list no longer exist. The burden of proof shall be on the foreign entity.
- "(e) DEFINITIONS.—In this section:
- "(1) AFFILIATE.—The term 'affiliate', with respect to an entity, means any entity that owns or controls, is owned or controlled by, or is under common ownership or control with, the entity.
- "(2) COUNTRY OF CONCERN.—The term 'country of concern' means a country with respect to which the Secretary determines that—
- "(A) persons in the country persistently use, without obtaining a license, patents—
- $\lq\lq(i)$  essential to the implementation of wireless communications standards; and
  - "(ii) held by a covered person; and
- "(B) that use of patents poses a threat to—
- "(i) the ability of the United States to maintain a wireless communications research and development infrastructure; and
- "(ii) the national security of the United States, pursuant to the policy set forth in section 234.
- "(3) COVERED PERSON.—The term 'covered person' means—
- "(A) a covered United States person; or
- ``(B) an affiliate of a covered United States person—
- "(i) headquartered in, or organized under the laws of, a country that is a member of the European Union or the North Atlantic Treaty Organization; and
- "(ii) engaged in wireless communications research and development.
- "(4) COVERED UNITED STATES PERSON.—The term 'covered United States person' means a United States person engaged in wireless communications research and development in the United States
- $\lq\lq(5)$  Person of concern.—The term 'person of concern' means a person that is—
- "(A) an individual who is a citizen or national (as defined in section 101(a) of the Immigration and Nationality Act (8 U.S.C. 1101(a))) of a country of concern; or
- "(B) an entity that is headquartered in, or organized under the laws of, a country of concern.
- "(6) UNITED STATES PERSON.—The term 'United States person' means—
- "(A) an individual who is a United States citizen or an alien lawfully admitted for permanent residence to the United States;
- "(B) an entity organized under the laws of the United States or any jurisdiction within the United States, including a foreign branch of such an entity; or
- "(C) any person in the United States.
- ''(7) WIRELESS COMMUNICATIONS STAND-ARD.—The term 'wireless communications standard' means—

- "(A) a cellular wireless telecommunications standard, including such a standard promulgated by the 3rd Generation Partnership Project (commonly known as '3GPP') or the 3rd Generation Partnership Project 2 (commonly known as '3GPP2'); or
- "(B) a wireless local area network standard, including such a standard designated as IEEE 802.11 as developed by the Institute of Electrical and Electronics Engineers (commonly known as the 'IEEE').

#### "SEC. 236. IMPORT SANCTIONS WITH RESPECT TO CERTAIN FOREIGN ENTITIES THAT THREATEN NATIONAL SECURITY.

- "(a) IN GENERAL.—Any foreign entity on the list required by section 235(a) may be subject to such controls on the importing of goods or technology into the United States as the President may prescribe.
  - "(b) Entry Under Bond.—
- "(1) IN GENERAL.—Unless otherwise prescribed by the President, a product described in paragraph (2) may not enter the United States except under bond prescribed by the Secretary of Commerce in an amount determined by the Secretary to be sufficient to protect from injury a covered United States person that made the demonstration described in section 235(b)(2) with respect to the entity that has been selling the product directly or indirectly in or into the United States.
- "(2) PRODUCTS DESCRIBED.—A product described in this paragraph is a wireless communications device—
  - "(A) produced or sold by-
- "(i) a foreign entity on the watch list required by section 235(b);
- "(ii) a successor of such an entity; or
- "(iii) an affiliate of an entity described in clause (i) or (ii); and
- "(B) that is claimed, labeled, marketed, or advertised as complying with a wireless communications standard that was the basis for the inclusion of the foreign entity on the watch list.
- "(c) Forfeiture of Bond.—
- "(1) IN GENERAL.—If a foreign entity on the watch list required by section 235(b) is moved to the list required by section 235(a) and becomes subject to controls under subsection (a), a bond paid under subsection (b) shall be forfeited to a covered United States person that made the demonstration described in section 235(b)(2) with respect to the entity.
- "(2) TERMS AND CONDITIONS.—The Secretary of Commerce shall prescribe the procedures and any terms or conditions under which bonds will be forfeited under paragraph (1).
- graph (1). "(d) Non-interest-bearing Bonds.—A bond under this section shall be non-interest-bearing.
- "(e) DEFINITIONS.—In this section, the terms 'affiliate' and 'covered United States person' have the meanings given those terms in section 235(d)."
- (b) CONTROLS ON IMPORTS OF GOODS OR TECHNOLOGY AGAINST PERSONS THAT RAISE NATIONAL SECURITY CONCERNS.—Section 233 of the Trade Expansion Act of 1962 (19 U.S.C. 1864) is amended to read as follows:

### "SEC. 233. IMPORT SANCTIONS FOR EXPORT VIO-LATIONS.

- "(a) IN GENERAL.—A person described in subsection (b) may be subject to such controls on the importing of goods or technology into the United States as the President may prescribe.
- "(b) PERSONS DESCRIBED.—A person described in this subsection is a person that—
- "(1) violates any national security export control imposed under section 1755 of the Export Control Reform Act of 2018 (50 U.S.C. 4814) or any regulation, order, or license issued under that section; or
- ``(2) raises a national security concernunder—

- "(A) section 235 or any regulation, order, or license issued under that section; or
- "(B) the Export Control Reform Act of 2018 (50 U.S.C. 4801 et seq.) or any regulation, order, or license issued under that Act.".
- SA 1933. Mrs. HYDE-SMITH submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in subtitle B of title VI of division B, insert the following:

## SEC. 26\_\_\_. HYDROGEN RESEARCH AND DEVELOPMENT AND TESTING.

- (a) IN GENERAL.—The Administrator shall fully leverage and use the unique hydrogen expertise, fuel farm, and testing platforms co-located with NASA large-scale rocket propulsion test facilities for testing federally funded programs or public-private partnerships involving the use of hydrogen in space exploration, space technology, and aeronautics.
  - (b) Maintenance of Expertise.—
- (1) IN GENERAL.—The Administrator shall maintain the hydrogen expertise, fuel farm, and testing platforms co-located with NASA large-scale rocket propulsion test facilities for the purpose of supporting ongoing activities associated with liquid oxygen-hydrogen rockets, including the Space Launch System and the Exploration Upper Stage for the Space Launch System.
- (2) AVAILABILITY.—The Administrator shall make the expertise and infrastructure described in paragraph (1) available to Government and commercial vehicles that may benefit from testing at NASA hydrogen test facilities.
- (c) Testing Capabilities and Platforms.—The Administrator shall consider investments in future testing capabilities and platforms to support a range of hydrogen systems in—
- (1) space systems, including launch vehicles and spacecraft; and
- (2) aeronautics research and development, including unmanned aircraft systems.
- (d) RESEARCH AND DEVELOPMENT.—The Administrator, to the extent practicable, shall coordinate with research universities and other Federal agencies to incorporate hydrogen capabilities into research and development and testing road maps across programs
- (e) REPORT.—Not later than 180 days after the date of the enactment of this division, the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that—
- (1) identifies all current and planned NASA-funded programs and public-private partnerships that involve the research, development, and testing of space exploration, space technology, and aeronautics systems using hydrogen, including propulsion systems, hydrogen fuel tanks, transfer systems, and integrated systems and vehicles;
- (2) describes the manner in which each such program or partnership is currently, or may in the future, use NASA hydrogen research and development and testing capabilities: and